# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

Plaintiff.

C.A. No. 01-504 SLR

SMITH & NEPHEW, INC.,

Defendant.

DEFENDANT SMITH & NEPHEW, INC.'S SUPPLEMENTAL RESPONSES TO PLAINTIFF ARTHROCARE CORPORATION'S INTERROGATORIES NOS. 4 AND 5

Smith & Nephew, Inc. ("Smith & Nephew") supplements its answers and objections to ArthroCare Corporation's ("ArthroCare") First Set of Interrogatories [Nos. 1-7] as follows:

### **GENERAL OBJECTIONS**

- 1. Smith & Nephew objects to the definitions and instructions and to each interrogatory to the extent they are inconsistent with and more burdensome than the Federal Rules of Civil Procedure, the Delaware Local Rules and the orders of this Court. For example, Smith & Nephew objects to Instruction No. 11 as inconsistent with and more burdensome than the applicable rules and orders governing claims of privilege and work product for interrogatory responses. Smith & Nephew will comply with the Federal Rules of Civil Procedure, the Delaware Local Rules and the orders of this Court.
- 2. Smith & Nephew objects to each interrogatory to the extent it seeks disclosure of information protected by the attorney-client privilege, work product doctrine, or other applicable privilege or immunity. Any disclosure Smith & Nephew makes of such information is

inadvertent and does not constitute a waiver of the applicable privilege or immunity as to such information.

- 3. Smith & Nephew objects to each interrogatory to the extent it seeks disclosure of confidential information, until such time that a suitable protective order is entered in this case. It is expected that the parties will be able to agree to the terms of such a protective order without assistance from the Court, which will, inter alia, specify how confidential information is to be designated. Smith & Nephew is in the process of drafting a suitable protective order, which will be provided shortly. Smith & Nephew also objects to disclosing information that Smith & Nephew is obligated to third parties to maintain as confidential. Smith & Nephew will seek the permission of such third parties to disclose such information, once a suitable protective order is entered.
- 4. Smith & Nephew objects that the definition of "ArthroCare" is vague. Smith & Nephew will respond on the basis that the term "ArthroCare" is understood to refer to the plaintiff in this action, ArthroCare Corp., and its employees and agents.
- 5. Smith & Nephew objects that the definition of "Defendant," "Smith & Nephew," "You," and "Your" is vague and overbroad, and seeks irrelevant information not related to any claim or defense in this action. The only Smith & Nephew business unit that is involved in making and selling the accused product is the Endoscopy Division of Smith & Nephew.

  Accordingly, Smith & Nephew will respond on the basis that the terms "Defendant," "Smith & Nephew," "You," and "Your" are understood to mean Smith & Nephew's Endoscopy Division.
- 6. Smith & Nephew objects that the definition of "Relates To," "Relating To," "In Relation To," and "Related To" is overbroad, unduly burdensome, and seeks irrelevant information not related to any claim or defense in this action. Smith & Nephew will interpret these terms as meaning "constituting, containing, referring to, describing, analyzing, and discussing" and their cognates to "Relates To" and "Related To."

- 7. Smith & Nephew objects that the definition of "identify" is overbroad and unduly burdensome. Rather than provide the information requested, where an interrogatory asks that Smith & Nephew "identify" an individual, Smith & Nephew may instead provide sufficient information from which ArthroCare can contact the individual; where an interrogatory asks that Smith & Nephew "identify" a document, Smith & Nephew may instead produce the document and/or provide the production number range for the document.
- 8. Smith & Nephew objects that the definition of "Accused Device" is overbroad and unduly burdensome and seeks irrelevant information not related to any claim or defense in this action. The only products falling within ArthroCare's definition of "Accused Device" which have been introduced to the marketplace are the Dyonics Control RF Adaptor and the Dyonics Series 7000 RF RS Probe. Accordingly, Smith & Nephew will respond on the basis that the term "Accused Device" is understood to mean only the Dyonics Control RF Adaptor and the Dyonics Series 7000 RF RS Probe.
- 9. In accordance with Local Rule 26.1(b), Smith & Nephew shall count each subpart as a separate interrogatory. Smith & Nephew notes that ArthroCare's First Set of Interrogatories has numerous subparts, each of which comprises a separate interrogatory under the Federal Rules of Civil Procedure. Smith & Nephew objects to ArthroCare serving more than 35 interrogatories, thereby violating the agreed upon Scheduling Order. In order to expedite discovery, Smith & Nephew has not undertaken the task of enumerating each separate subpart contained within ArthroCare's interrogatories. If ArthroCare propounds additional interrogatories, however, Smith & Nephew will undertake such a task to ensure that ArthroCare does not exceed the numerical limit imposed by the Scheduling Order.
- 10. Discovery and analysis are ongoing in this case. Smith & Nephew reserves the right to supplement its responses as such discovery and analysis make necessary.

### **INTERROGATORY NO. 4**

State in detail all facts upon which Defendant bases its denial of infringement of any of the Patents-In-Suit, including without limitation the Identity of the individuals with knowledge of any such facts and the Identity of all Documents and things Relating To any such facts.

### **RESPONSE TO INTERROGATORY NO. 4**

In addition to the General Objections, Smith & Nephew also objects to this interrogatory to the extent it seeks information protected by attorney-client privilege and/or work product immunity. Smith & Nephew further objects to this interrogatory as overly broad and premature contention discovery: discovery in the case has just begun, there are more than 160 claims in the patents-in-suit, and only recently, i.e., on November 2, 2001, did ArthroCare disclose the identity of certain independent claims it is asserting, and even then, ArthroCare's claim designation was indicated to be tentative. ArthroCare still has not disclosed the identity of the dependent claims it is asserting despite having been asked to do so several times by Smith & Nephew.

Accordingly, Smith & Nephew objects to ArthroCare's attempts to take contention discovery in such a piecemeal fashion.

Further answering, Smith & Nephew notes that in its interrogatories served on October 10, 2001, and in particular in Interrogatory Nos. 1-3, Smith & Nephew asked ArthroCare to identify the asserted claims and to provide its contentions as to claim construction. ArthroCare has requested an extension until December 10, 2001 to respond to these interrogatories.

Accordingly, Smith & Nephew reserves its right to supplement its response to this interrogatory once ArthroCare answers Smith & Nephew's interrogatories, and as discovery proceeds.

### SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 4

In addition to the information provided in response to this interrogatory and subject to and without waiving the general and specific objections therein, and based on the information currently available to it, Smith & Nephew supplements its response as follows: Smith & Nephew further objects to this interrogatory as being premature in light of the current status of this case, as discovery has just begun, ArthroCare has produced almost no confidential documents to Smith & Nephew, expert discovery in this case has not begun, and initial expert reports are not due until September 13, 2002.

Smith & Nephew also objects to this interrogatory on the grounds that ArthroCare has improperly refused to respond to Smith & Nephew's interrogatory requesting that ArthroCare identify how the asserted claims of the patents-in-suit should be construed on the grounds that any interrogatory requesting such information is purportedly superseded by the Court's scheduling order in this case. Arthrocare is wrong. The court's decision to set a date for exchange of final claim construction contentions does not relieve Arthrocare of its responsibility to timely respond to relevant discovery directed to Arthrocare's claim construction contentions. As clearly set forth in Smith & Nephew's initial response, Smith & Nephew indicated that it would supplement its response to this interrogatory once ArthroCare provided its contentions as to claim construction as requested in Smith & Nephew's interrogatories. However, ArthroCare has refused to do so. Smith & Nephew further objects to this interrogatory on the grounds that ArthroCare has failed to meaningfully respond to Smith & Nephew's interrogatory seeking ArthroCare's infringement contentions. It is manifestly unfair, as well as nonscusical since ArthroCare bears the burden of proof on the issue, for ArthroCare to demand Smith & Nephew's

non-infringement contentions without first providing meaningful responses to Smith & Nephew's interrogatory seeking ArthroCare's infringement contentions. Accordingly, Smith & Nephew reserves its right to supplement its response to this interrogatory once ArthroCare answers Smith & Nephew's interrogatories, and as discovery proceeds.

### INTERROGATORY NO. 5

State in detail all facts upon which Defendant bases its allegation that any of the Patents-In-Suit are invalid, including without limitation the Identity of the individuals with knowledge of any such facts and the Identity of all Documents and things Relating To any such facts.

### **RESPONSE TO INTERROGATORY NO. 5**

In addition to the General Objections, Smith & Nephew also objects to this interrogatory to the extent it seeks information protected by attorney-client privilege and/or work product immunity. Smith & Nephew further objects to this interrogatory as overly broad and premature contention discovery: discovery in the case has just begun, there are more than 160 claims in the patents-in-suit, and only recently, i.e., on November 2, 2001, did ArthroCare disclose the identity of certain independent claims it is asserting, and even then, ArthroCare's claim designation was indicated to be tentative. ArthroCare still has not disclosed the identity of the dependent claims it is asserting despite having been asked to do so several times by Smith & Nephew.

Accordingly, Smith & Nephew objects to ArthroCare's attempts to take contention discovery in such a piecemeal fashion.

Further answering, Smith & Nephew notes that in its interrogatories served on October 10, 2001, and in particular in Interrogatory Nos. 1-3, Smith & Nephew asked ArthroCare to identify the asserted claims and to provide its contentions as to claim construction. In addition, in Interrogatory Nos. 4, 5, 7, and 12, and in its First Request For Production And Things, Smith & Nephew asked ArthroCare to provide certain information regarding the subject matter of this interrogatory. ArthroCare has requested an extension until December 10, 2001 to respond to these interrogatories and requests for production. Accordingly, Smith & Nephew reserves its

right to supplement its response to this interrogatory once ArthroCare provides its responses to Smith & Nephew's interrogatories and requests for production, and as discovery proceeds.

Subject to its objections and without walving any objection, Smith & Nephew responds as follows:

As of the present time, Smith & Nephew contends that the asserted claims are invalid for at least the same reasons as, and to the same extent as, set forth in Judge Orrick's Memorandum Decision and Order of December 1, 1998 in the case of Arthrocare Corp. v. Ethicon. Inc., Civil Action No. C-98-0609-WHO (N.D. Cal.)

# SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 5

In addition to the information provided in response to this interrogatory and subject to and without waiving the general and specific objections therein, and based on the information currently available to it, Smith & Nephew supplements its response as follows: Smith & Nephew further objects to this interrogatory as being premature in light of the current status of this case, as discovery has just begun, ArthroCare has produced almost no confidential documents to Smith & Nephew, expert discovery in this case has not begun, and initial expert reports are not due until September 13, 2002. Smith & Nephew further objects to this interrogatory on the grounds that ArthroCare has refused to identify how the asserted claims of the patents-in-suit should be construed. Smith & Nephew's discovery and investigation are ongoing. Smith & Nephew reserves the right to supplement and/or modify this response as additional material or information become available.

Subject to these objections, Smith & Nephew states that it may rely on one or more of the following references (or others to be identified later) to support Smith & Nephew's prior art invalidity defenses under 35 U.S.C. §§ 102 and 103 for each of the asserted claims set forth in Jared Bobrow's letter of November 2, 2001. Smith & Nephew is continuing to evaluate the

relevant prior art and, if necessary, will provide additional detail on its contentions at an appropriate later date.

# U.S. Patent No. 5,697,536: Claim 45

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
08/16/33	US 2,056,377	F.C. Wappler	Electronic Instrument
05/00/69	Bio-Medical	A.K. Dobbie	The Electrical Aspects of
	Engineering 206-216		Surgical Diathermy
06/11/74	US 3,815,604	Conor C. O'Malley,	Apparatus For Intraocular
		Ralph M. Heintz, Sr.	Surgery
08/26/75	US 3,901,242	Karl Storz	Electric Surgical
	1		Instrument
00/00/76	Acta Medicotechnica	E. Elsasser and E. Roos	Uber ein Instrument zur
	(Medizinal-Markt),	2. 1003	leckstromfreien
	Vol. 24, No. 4, 1976	ľ	
	129 – 134		transurethralen Resection
,			(Concerning An Instrument for
			1
•		1.	Transurethral resection
02/24/76	US 3,939,839	Lawrence E. Curtiss	without leakage of curren
	000,000	Lawrence E. Curuss	Resectoscope and
01/07/77	2 313 949/	Siegfried Hiltebrandt et	Electrode Therefor
	N 76 17587	Ludwig Bonnet	Boucle de sectionnement
		Ludwig Boimet	une ou deux branches pour
00/00/78	Gastroenterology,	J.R.A. Piercey, M.D.	resertoscope
	Vol. 74, No. 3, 527-	D.C. Auth, Ph.D, P.E.,	Electrosurgical Treatment
	534, 1978	F.E. Silverstein, M.D.,	of Experimental Bleeding
•	00 1, 1970	H.R. Willard, Ph.D.	Canine Gastric Ulcers:
		M.B. Dennis, D.V.M.,	Development and testing
		D.M. Ellefson, B.S.,	of a computer control and
			a better electrode
	•	D.M. Davis, M.S.E.E., R.L. Protell, M.D. and	•
09/26/78	US 4,116,198	C.E. Rubin, M.D.  Eberhard Roos	<del>71</del>
11/00/79	Digestive Diseases		Electro-Surgical Device
- ~ ~ ~ ~ / / /	and Sciences, Vol. 24.		Evolution of
	No. 11, 845-848		Electrofulguration in
.	140-11, 043-040		Control of Bleeding of
. [			Experimental Gastric
01/01/80	TIC 4 101 121		Ulcers
011/01/00	US 4,181,131		High Frequency
			Electrosurgical Instrument

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
			for Cutting Human Body Cavity Structures
01/22/80	US 4,184,492	Hans H. Meinke, Gerhard Flachenecker, Karl Fastenmeier, Friedrich Landstorfer, Heinz Lidenmeier	Safety Circuitry for High Frequency Cutting and Coagulating Devices
11/11/80	US 4,232,676	Andrew Herczog	Surgical Cutting Instrument
02/03/81	US 4,248,231	Andrew Herczog and James A. Murphy	Surgical Cutting Instrument
02/00/82	CRC Press, American Heart Journal, Vol. 117, 332-341	Kevin J. Barry, MS, Jonathan Kaplan, MD, Raymond J. Connolly,	The effect of radiofrequency-generated thermal energy on the
ess in Marching I have e	***	Ph.D, Paul Nardella, BS, Benjamin I. Lee, MD, Gary J. Becker, MD, Bruce F. Waller, MD, and Allan D. Callow, MD, Ph.D	mechanical and histologic characteristics of the arterial wall in vivo: Implications for radiofrequency angioplasty
04/27/82	US 4,326,529	James D. Doss and Richard L. Hutson	Comeal-Shaping Electrode
04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal- Shaping Electrode with Flexible Removable Skirt
00/00/85	Urological Research 13:99-102	J.W.A. Ramsay, N.A. Shepherd, M. Butler, P.T. Gosling, R.A. Miller, D.M.A. Wallace, H.N. Whitfield	A Comparison of Bipolar and Monopolar Diathermy Probes in Experimental Animals
06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Bom,	Vaporization of Atherosclerotic Plaques by Spark Erosion
05/27/86	US 4,590,934	Ph.D, Patrick W. Serniya, MD, Geert T. Meester, MD, FACC Jerry L. Malis, Leonard	Bipolar Cutter/Coagulator
		I. Malis, Robert R. Acorcey, David Solt	
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
00/00/89	The Organizing	Robert Tucker and	A Bipolar Electrosurgical

ISSUE/			<del></del>
PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
	Committee of the 7th World Congress on Endourology and ESWL Foundation for Advancement of International Science	Stefan Loening	Turp Loop
02/21/89	US 4.805,616	David S.C. Pao	Bipolar Probes for Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
03/00/89	Journal of Urology Vol. 141, 662-665	Robert D. Tucker, Eugene V. Kramolowsky, Eric Bedell and Charles E. Platz	A Comparison of Urologic Application of Bipolar Versus Monopolar Five French Electrosurgical Probes
04/00/89	JACC Vol. 13 No. 5, 1167-75	Benjamin I. Lee, MD, FACC, Gary J. Becker, MD, Bruce F. Waller, MD, FACC, Kevin J. Barry, MS, Raymond J. Connolly, Ph.D, Jonathan Kaplan, MD, Alan R. Shapiro, MS, Paul C. Nardella, BS	Thermal Compression and Molding of Atherosclerotic Vascular Tissue With Use of Radiofrequency Energy: Implications for Radiofrequency Balloon Angioplasty
04/25/89	US 4,823,791	Frank D. D'Amelio, Dawn M. DeLemos, Dominick G. Esposito, Michelle D. Maxfield, Claude E. Petruzzi, Robert H. Quint	Electrosurgical Probe Apparatus
00/00/90	Urological Research 18:291-294	R.D. Tucker, E.V. Kramolowsky, and C.E. Platz	In vivo effect of 5 French bipolar and monopolar electrosurgical probes on the porcine bladder
		Kramolowsky and Robert D. Tucker	Use of 5F Bipolar Electrosurgical Probe in Endoscopic Urologiical Procedures
04/05/90		John Considine, John Colin	Electro-surgical Apparatus for Removing Tumours from Hollow Organs of the Body

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
05/01/90	US 4,920,978	David P. Colvin	Method and Apparatus for the Endoscopic Treatment of Deep Tumors Using RF Hyperthermia
06/05/90	US 4,931,047	Alan Broadwin, Charles Vassallo, Joseph N. Logan, Robert W. Hornlein	Method and Apparatus For Providing Enhanced Tissue Fragmentation And/Or Hemostasis
12/11/90	US 4,976,711	David J. Parins, Mark A. Rydell, Peter Stasz	Ablation Catheter With Selectively Deployable Electrodes
12/25/90	US 4,979,948	Lesslie A. Geddes, Marvin H. Hinds, Joe D. Bourland, William D. Voorhees	Method and Apparatus for Thermally Destroying A Layer of An Organ
03/21/91	DE 3930451 A1	Ellen Hoffmann, Gerhard, Steinbeck, Rudi Mattmuller	Vorrichtung für die Hochfrequenzkoagulation von biologischem Gewebe
04/16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument Having Needle Cutting Electrode And Spot-Coag Electrode
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical Instrument
07/30/91	US 5,035,696	Mark A. Rydell	Electrosurgical Instrument for Conducting Endoscopic Retrograde Sphincterotomy
09/00/91	Journal of Urology Vol. 146, 669	Eugene V. Kramolowsky and Robert D. Tucker	The Urological Application of Electrosurgery
09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector
10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/04/92	US 5,085,659	Mark A. Rydell	Biopsy Device With Bipolar Coagulation Capability
02/18/92	US 5,088,997	Louis Delahuerga, Robert B. Stoddard, Michael S. Klicek	Gas Coagulation Device

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing Accessory and Method for an Endoscope
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
12/15/92	US 5,171,311	Mark A. Rydell, David J. Parins, Steven W. Berhow	Percutaneous Laparoscopic Cholectectomy Instrument
05/04/93	US 5,207,675	Jerome Canady	Surgical Coagulation Device
06/08/93	US 5,217,459	William Kamerling	Method and Instrument for Performing Eye Surgery
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

In addition, Smith & Nephew may rely on the findings of fact made by Judge William H. Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he found that "every element of claim 45 of the '536 patent . . . appear[s] in the Roos '198 patent." Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

# U.S. Patent No. 5,697,882: Claim 1

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
08/16/33	US 2,056,377	F.C. Wappler	Electronic Instrument
05/00/69	Bio-Medical Engineering 206-216	A.K. Dobbie	The Electrical Aspects of Surgical Diathermy

08/26/75	110 2 001 010		
08/20/73	US 3,901,242	Karl Storz	Electric Surgical
06/11/74	11/4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Instrument
00/11/74	U\$ 3,815,604	Conor C. O'Malley,	Apparatus For Intraocular
00/00/0	·	Ralph M. Heintz, Sr.	Surgery
00/00/76	Acta Medicotechnica	E. Elsasser and E. Roos	Uber ein Instrument zur
	(Medizinal-Markt),	1	leckstromfreien
	Vol. 24, No. 4, 1976	1	transurethralen Resection
:	129 - 134		(Concerning An
	·		Instrument for
		·	transurethral resection
			without leakage of current)
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and
			Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices
Ì			Having Sesquipolar
·		1	Electrode Structures
		1	Incorporated Therein
01/07/77	2 313 949/	Siegfried Hiltebrandt et	Boucle de sectionnement a
	N 76 17587	Ludwig Bonnet	
tento de Santo de Cara		Jan 18 Bonnio	une ou deux branches pour resertoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	
09/26/78	US 4,116,198	Eberhard Roos	Electrosurgical Instrument
11/00/79	Digestive Diseases	M.B. Dennis, J. Peoples,	Electro-Surgical Device Evolution of
	and Sciences, Vol. 24,	R. Hulett, D.C. Auth,	
İ	No. 11, 845-848	R.L. Protell, C.E. Rubin,	Electrofulguration in
		and F.E. Silverstein	Control of Bleeding of
	1	Jan 2 . 2. Shive Island	Experimental Gastric Ulcers
01/01/80	US 4,181,131	Hisao Ogiu	High Frequency
		The Ogic	Electrosurgical Instrument
			for Cutting Human Body
			Cavity Structures
01/22/80	US 4,184,492	Hans H. Meinke,	Safety Circuitry for High
		Gerhard Flachenecker,	Frequency Cutting and
		Karl Fastenmeier	Coagulating Devices
	1	Friedrich Landstorfer,	Coaganating Devices
		Heinz Lidenmeier	
4/27/82	US 4,326,529	James D. Doss and	Comeal-Shaping Electrode
•		Richard L. Hutson	Comeat-Shaping Electrode
04/26/83	US 4,381,007	James D. Doss	Multipolar Corneal-
•		Julios D. Doss	
•			Shaping Electrode with
00/00/84	Gut, 25, 1424-1431	C.P. Swain, TN Mills, E.	Flexible Removable Skirt
	=	Shemesh, Julia M. Dark,	Which Electrode? A
•		M.R. Lewin, J.S.	comparison of four
		Cliffon, T.C. Northfield,	endoscopic methods of
	<u> </u>	Christi, I.C. Northneid,	electrocoagulation in

<u> </u>	T	P.B. Cotton, and P.R.	
		Salmon	experimental bleeding
00/00/85	Urological Research		ulcers
00/00/03	13:99-102	J.W.A. Ramsay, N.A.	A Comparison of Bipolar
	13:99-102	Shepherd, M. Butler,	and Monopolar Diathermy
	_	P.T. Gosling, R.A.	Probes in Experimental
		Miller, D.M.A. Wallace,	Animals
		H.N. Whitfield	1.
06/00/85	JACC Vol. 5, No. 6,	Cornelis J. Slager, MSc,	Vaporization of
	1382-6	Catharina E. Essed, MD,	Atherosclerotic Plaques by
		Johan C.H. Schuurbiers,	Spark Erosion
]		BSc, Nicolaas Born,	
	1	Ph.D. Patrick W.	}
	1	Serruys, MD, Geert T.	
		Meester, MD, FACC	
10/22/85	US 4,548,207	Harry G. Reimels	Disposable Coagulator
05/27/86	US 4,590,934	Jerry L. Malis, Leonard	Bipolar Cutter/Coagulator
	1	I. Malis, Robert R.	
	1 .	Acorcey, David Solt	
00/00/87	Kardiologie,	C.J. Slager, A.C. Phaff,	Spark Erosion of
	Kardiol.76: Supp. 6.	C.E. Essed, J.C.H.	Arteriosclerotic Plaques
	67-71 (1987)	Schuurbiers, N. Born,	
		V.A. Vandenbroucke,	
		and P.W. Serruys	
4/28/87	US 4,660,571	Stanley R. Hess, Terri	Percutaneous Lead Having
		Kovacs	Radially Adjustable
			Electrode
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
00/00/89	The Organizing	Robert Tucker and	A Bipolar Electrosurgical
•	Committee of the 7th	Stefan Loening	Turp Loop
	World Congress on		•
	Endourology and		
•	ESWL Foundation for		
	Advancement of	-	
	International Science		
00/00/89	SPIE Vol. 1068	Paul C. Nardella	Radio Frequency Energy
•	Catheter-based		and Impedance Feedback
	Sensing and Imaging		
	Technology	·	
02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for
			Ophthalmic Surgery and
			Methods of Performing
	-	·	Anterior Capsulotomy
03/00/89	Journal of Urology	Robert D. Tucker,	A Comparison of Urologic
	Vol. 141, 662-665	Eugene V.	Application of Bipolar
		Kramolowsky, Eric	Versus Monopolar Five
	<u>L</u>	Maniolowsky, Elic	A crons Monohorat 1.1AC

		1	Bedell and Charles E.	Const Clari
Į.			Platz	French Electrosurgical Probes
04/	/00/89	JACC Vol. 13 No. 5,	Benjamin I. Lee, MD,	Thermal Compression and
		1167-75	FACC, Gary J. Becker,	Molding of Atherosclerotic
l			MD, Bruce F. Waller,	Vascular Tissue With Use
			MD, FACC, Kevin J.	of Radiofrequency Energy:
			Barry, MS, Raymond J.	Implications for
			Connolly, Ph.D.	Radiofrequency Balloon
			Jonathan Kaplan, MD,	Angioplasty
i			Alan R. Shapiro, MS,	
			Paul C. Nardella, BS	
00/	(00/90	Urological Research	R.D. Tucker, E.V.	In vivo effect of 5 French
		18:291-294	Kramolowsky, and C.E.	bipolar and monopolar
			Platz	electrosurgical probes on
<u> </u>				the porcine bladder
02/	/00/90	Journal of Urology	Eugene V.	Use of 5F Bipolar
}		Vol. 143, 275-277	Kramolowsky and	Electrosurgical Probe in
			Robert D. Tucker	Endoscopic Urologiical
				Procedures
04/	05/90	WO 90/03152	John Considine, John	Electro-surgical Apparatus
ŀ			Colin	for Removing Tumours
				from Hollow Organs of the
	10.5.100	T/O / OO / O/O		Body
06/	05/90	US 4,931,047	Alan Broadwin, Charles	Method and Apparatus For
		•	Vassalio, Joseph N.	Providing Enhanced
1			Logan, Robert W. Hornlein	Tissue Fragmentation And/Or Hemostasis
06/	26/90	US 4,936,281	Peter Stasz	Ultrasonically Enhanced
. 007	2W 7U	03 4,930,261	L CICH DIGGS	RF Ablation Catheter
12/	/11/90	US 4,976,711	David J. Parins, Mark A.	Ablation Catheter With
			Rydell, Peter Stasz	Selectively Deployable
				Electrodes
12/	25/90	US 4,979,948	Lesslie A. Geddes,	Method and Apparatus for
1	·		Marvin H. Hinds, Joe D.	Thermally Destroying A
			Bourland, William D.	Layer of An Organ
		· · · <u>· · · · · · · · · · · · · · · · </u>	Voorhees	
04/	16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument
1				Having Needle Cutting
				Electrode And Spot-Coag
				Electrode
04/	23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical
	MA 10 4	112 6 00 6 60 6		Instrument
07/	30/91	US 5,035,696	Mark A. Rydell	Electrosurgical Instrument
ľ				for Conducting
L	·			Endoscopic Retrograde

			1	Sphincterotomy
	09/00/91	Journal of Urology	Eugene V.	The Urological
		Vol. 146, 669	Kramolowsky and	Application of
			Robert D. Tucker	Electrosurgery
	09/10/91	US 5,047,026	Mark A. Rydell	
			, was the region	Electrosurgical Implement
				For Tunneling Through Tissue
-	09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector
	10/07/91	Bipolar Laparoscopic	Dr. Olsen	Bipolar Laparoscopic
		Cholecystectomy		Cholecystectomy
		Lecture		Cholecyslectomy
	01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
	02/18/92	US 5,088,997	Louis Delahuerga,	Gas Coagulation Device
			Robert B. Stoddard,	on ovagalation before
			Michael S. Klicek	
	03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
	04/28/92	US 5,108,391	Gerhard Flachenecker.	High-Frequency Generator
			Karl Fastenmeier, Heinz	For Tissue Cutting And
			Lindenmeier	For Coagulating In High-
				Frequency Surgery
	05/12/92	US 5,112,330	Shinichi Nishigaki,	Resectoscope Apparatus
•			Shiro Bito	- reserved to the reserved
	06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing
	•			Accessory and Method for
				an Endoscope
	12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo	Blood Coagulating
		1	Ninomiya	Apparants
	12/15/92	US 5,171,311	Mark A. Rydell, David	Percutaneous Laparoscopic
		1	J. Parins, Steven W.	Cholectectomy Instrument
	· .	<u> </u>	Berbow	
	03/30/93	US 5,197,963	David J. Parins	Electrosurgical Instrument
				with Extendable Sheath for
		• •		Irrigation and Aspiration
	04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic
		•.		Electrosurgical Pencil
	06/13/95	US 5,423,882	Warren M. Jackman,	Catheter Having Electrode
		[ ·	Wilton W. Webster, Jr.	with Annular Recess and
				Method of Using Same
_	10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter
				And Method For
				Resolving Artherosclerotic
				Plaque By Radio
				Frequency Sparking

Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

### U.S. Patent No. 5,697,882: Claim 26

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
05/00/69	Bio-Medical Engineering 206-216	A.K. Dobbie	The Electrical Aspects of Surgical Diathermy
08/16/33	US 2,056,377	F.C. Wappier	Electronic Instrument
06/11/74	US 3,815,604	Conor C. O'Malley, Ralph M. Heintz, Sr.	Apparatus For Intraocular Surgery
08/13/74	US 3,828,780	Charles F. Morrison, Jr.	Combined Electrocoagulator-Suction Instrument
01/00/75	IEEE Transactions On Biomedical Engineering	William M. Honig	The Mechanism of Cutting in Electrosurgery
08/26/75	US 3,901,242	Karl Storz	Electric Surgical Instrument
11/18/75	US 3,920,021	Siegfried Hiltebrandt	Coagulating Devices
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
00/00/76	Acta Medicotechnica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 – 134	E. Elsasser and E. Roos	Uber ein Instrument zur leckstromfreien transurethralen Resection (Concerning An Instrument for transurethral resection without leakage of current)
01/07/77	2 313 949/ N 76 17587	Siegfried Hiltebrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resertoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
06/06/78	US 4,092,986	Max Schneiderman	Constant Output Electrosurgical Unit
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
11/00/79	Digestive Diseases and Sciences, Vol. 24, No. 11, 845-848	M.B. Dennis, J. Peoples, R. Huiett, D.C. Auth, R.L. Protell, C.E. Rubin, and F.E. Silverstein	Evolution of Electrofulguration in Control of Bleeding of Experimental Gastric Ulcers
01/01/80	US 4,181,131	Hisao Ogiu	High Frequency

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		·	Electrosurgical Instrument
		i	for Cutting Human Body
			Cavity Structures
01/22/80	US 4,184,492	Hans H. Meinke,	Safety Circuitry for High
	•	Gerhard Flachenecker,	Frequency Cutting and
1	ţ	Karl Fastenmeier,	Coagulating Devices
		Friedrich Landstorfer,	Congulating Devices
		Heinz Lidenmeier	·
04/27/82	US 4,326,529	James D. Doss and	Co1 01
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Richard L. Hutson	Comcal-Shaping Electrode
04/26/83	US 4,381,007	James D. Doss	
	00 4,502,007	Junes D. Doss	Multipolar Corneal-Shaping
			Electrode with Flexible
00/00/84	C 26 1424 1421		Removable Skirt
00/00/04	Gut, 25, 1424-1431	C.P. Swain, TN Mills, E.	
		Shemesh, Julia M. Dark,	comparison of four
		M.R. Lewin, J.S.	endoscopic methods of
		Clifton, T.C. Northfield,	electrocoagulation in
		P.B. Cotton, and P.R.	experimental bleeding ulcers
		Salmon	1
00/00/85	Urological Research	J.W.A. Ramsay, N.A.	A Comparison of Bipolar
	13:99-102	Shepherd, M. Butler,	and Monopolar Diathermy
	1	P.T. Gosling, R.A.	Probes in Experimental
	1	Miller, D.M.A. Wallace,	Animals
		H.N. Whitfield	
06/00/85	JACC Vol. 5, No. 6,	Cornelis J. Slager, MSc.	Vaporization of
	1382-6	Catharina E. Essed, MD,	Atherosclerotic Plaques by
		Johan C.H. Schuurbiers,	Spark Erosion
	1	BSc, Nicolaas Born.	Spark Erosion
		Ph.D, Patrick W.	
	1	Serruys, MD, Geert T.	·
,	1	Meester, MD, FACC	
10/22/85	US 4,548,207		5.
05/27/86	US 4,590,934	Harry G. Reimels	Disposable Coagulator
VJ-2//00	۵۵ مرودره دن	Jerry L. Malis, Leonard	Bipolar Cutter/Coagulator
		I. Malis, Robert R.	·
00/00/87	773	Acorcey, David Solt	
VU/VU/8 /	Kardiologie,	C.J. Slager, A.C. Phaff,	Spark Erosion of
	Kardiol.76: Supp. 6,	C.E. Essed, J.C.H.	Arteriosclerotic Plaques
•	67-71 (1987)	Schuurbiers, N. Born,	
		V.A. Vandenbroucke,	
		and P.W. Serruys	
4/28/87	US 4,660,571	Stanley R. Hess, Terri	Percutaneous Lead Having
		Kovacs	Radially Adjustable
	<i>:</i> .	<b>,</b>	Electrode
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
07/00/88	Valleylab Part	Valleylab, Inc.	Surgistat Service Manual
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	Number 945 100 102 A	<u> </u>	
00/00/89	SPIE Vol. 1068 Catheter-based Sensing and Imaging Technology	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback
00/00/89	The Organizing Committee of the 7 <sup>th</sup> World Congress on Endourology and ESWL Foundation for Advancement of International Science	Robert Tucker and Stefan Loening	A Bipolar Electrosurgical Turp Loop
03/00/89	Journal of Urology Vol. 141, 662-665	Robert D. Tucker, Eugene V. Kramolowsky, Eric Bedell and Charles E. Platz	A Comparison of Urologic Application of Bipolar Versus Monopolar Five French Electrosurgical Probes
02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic Surgery and Methods of Performing Anterior Capsulotomy
04/00/89	JACC Vol. 13 No. 5, 1167-75	Benjamin I. Lee, MD, FACC, Gary J. Becker, MD, Bruce F. Waller, MD, FACC, Kevin J. Barry, MS, Raymond J. Connolly, Ph.D, Jonathan Kaplan, MD, Alan R. Shapiro, MS, Paul C. Nardella, BS	Thermal Compression and Molding of Atherosclerotic Vascular Tissue With Use of Radiofrequency Eneergy: Implications for Radiofrequency Balloon Angioplasty
00/00/90	Urological Research 18:291-294	R.D. Tucker, E.V. Kramolowsky, and C.E. Platz	In vivo effect of 5 French bipolar and monopolar electrosurgical probes on the porcine bladder
02/00/90	Journal of Urology Vol. 143, 275-277	Eugene V. Kramolowsky and Robert D. Tucker	Use of 5F Bipolar Electrosurgical Probe in Endoscopic Urologiical Procedures
04/05/90	WO 90/03152	John Considine, John Colin	Electro-surgical Apparatus for Removing Tumours from Hollow Organs of the Body
06/05/90	US 4,931,047	Alan Broadwin, Charles Vassallo, Joseph N. Logan, Robert W.	Method and Apparatus For Providing Enhanced Tissue Fragmentation And/Or

		Hornlein	Hemostasis
06/26/90	US 4,936,281	Peter Stasz	Ultrasonically Enhanced R
12/11/90	115 4 076 711	_	Ablation Catheter
12/11/70	US 4,976,711	David J. Parins, Mark A	
		Rydell, Peter Stasz	Selectively Deployable
12/25/90	17/0 1 050 010		Electrodes
12/23/90	US 4,979,948	Lesslie A. Geddes,	Method and Apparatus For
	•	Marvin H. Hinds, Joe D.	Thermally Destroying A
		Bourland, William D.	Layer Of An Organ
04/14/51		Voorhees	
04/16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument
•			Having Needle Cutting
			Electrode And Spot-Coag
			Electrode
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical
			Instrument
07/30/91	US 5,035,696	Mark A. Rydell	Electrosurgical Instrument
			For Conducting Endoscopi
<u> </u>		1 .	Retrograde Sphincterotom
09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement
		1	For Tunneling Through
			Tissue
09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector
09/00/91	Journal of Urology	Eugene V.	The Urological Application
	Vol. 146, 669	Kramolowsky and	of Electrosurgery
and common things of the control of an artist with		Robert D. Tucker	or Dioda osungery
10/07/91	Bipolar Laparoscopic	Dr. Olsen	Bipolar Laparoscopic
	Cholecystectomy		Cholecystectomy
	Lecture	•	one of section in
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/18/92	US 5,088,997	Louis Delahuerga,	Gas Coagulation Device
	1	Robert B. Stoddard	Series Doving
		Michael S. Klicek	
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
04/28/92	US 5,108,391	Gerhard Flachenecker.	High-Frequency Generator
· <del></del>		Karl Fastenmeier, Heinz	For Tissue Cutting And For
		Lindenmeier	Coomishing T. IV-L
			Coagulating In High-
05/12/92	U\$ 5,112,330	Shinichi Nishigaki,	Frequency Surgery
		Shiro Bito	Resectoscope Apparatus
06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing
٠.			Accessory and Method for
	•		an Endoscope
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo	Blood Coagulating
1		Ninomiya	Apparatus

12/15/92	US 5,171,311	Mark A. Rydell, David J. Parins, Steven W. Berhow	Percutaneous Laparoscopic Cholectectomy Instrument
03/30/93	US 5,197,963	David J. Parins	Electrosurgical Instrument with Extendable Sheath for Irrigation and Aspiration
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

In addition, Smith & Nephew may rely on the findings of fact made by Judge William H. Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he found that there was "a substantial question to whether claim 26 of the '882 patent is invalid for obviousness in light of the Roos '198 patent and the Elsasser and Roos article." Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

U.S. Patent No. 5,697,882: Claim 28

ISSUE/ PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
08/16/33	US 2,056,377	F.C. Wappler	Electronic Instrument
08/26/75	US 3,901,242	Karl Storz	Electric Surgical Instrument
11/18/75	US 3,920,021	Siegfried Hiltebrandt	Coagulating Devices
00/00/76	Acta Medicotechnica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 – 134	E. Elsasser and E. Roos	Uber ein Instrument zur leckstromfreien transurethralen Resection (Concerning An Instrument for Transurethral resection without leakage of current)
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor

07/20/76 US 3.970.088 Charles F Morrison   Floring	
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Electrosurgical Instrum	
Cutting Human Body C	avity
01/22/80 US 4.184.492 Hans H. Meinke Safety Circuitary for Ule	
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Gerhard Flachenecker, Frequency Cutting and	•
Karl Fastenmeier, Coagulating Devices	
Friedrich Landstorfer, Heinz Lidenmeier	
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and Allan D. Callow.	
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4/27/82 US 4,326,529 James D. Doss and Corneal-Shaping Electro	wie
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Shemesh, Julia M. Dark, comparison of four endo	scopic
M.R. Lewin, J.S. methods of electrocoagu	
Clifton, T.C. Northfield, in experimental bleeding	
P.B. Cotton, and P.R. ulcers	·
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10/22/85 US 4,548,207 Harry G. Reimels Disposable Coagulator	
00/00/85 Urological Research J.W.A. Ramsay, N.A. A Comparison of Bipola	r and
13:99-102 Shepherd, M. Butler, Monopolar Diathermy P	
P.T. Gosling, R.A. in Experimental Animal	s
Miller, D.M.A. Wallace,	}
H.N. Whitfield	ŀ
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	1382-6	Catharina E. Essed, MD,	Atherosclerotic Plaques by
		Johan C.H. Schuurbiers,	Spark Erosion
		BSc, Nicolaas Bom,	
		Ph.D, Patrick W.	
		Serruys, MD, Geert T.	
		Meester, MD, FACC	
05/27/86	US 4,590,934	Jerry L. Malis, Leonard	Bipolar Cutter/Coagulator
		I. Malis, Robert R.	Ospona Obstor Congulator
		Acorcey, David Solt	
00/00/87	Kardiologie,	C.J. Slager, A.C. Phaff,	Spark Erosion of
	Kardiol.76: Supp. 6,	C.E. Essed, J.C.H.	Arterioselerotic Plaques
•	67-71 (1987)	Schuurbiers, N. Born,	to to to to talques
	(330)	V.A. Vandenbroucke,	
		and P.W. Serruys	
04/28/87	US 4,660,571	Stanley R. Hess, Terri	Percutaneous Lead Having
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06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
03/00/89	Journal of Urology	Robert D. Tucker,	A Comparison of Urologic
03/00/07	Vol. 141, 662-665	Eugene V.	Application of Bipolar Versus
	101. 141, 002-003	Kramolowsky, Eric	Monopolar Five French
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	Ĭ.	Bedeil and Charles E. Platz	Electrosurgical Probes
00/00/89	SPIE Vol. 1068	<del>-</del> -	D. U. F.
00/00/89		Paul C. Nardella	Radio Frequency Energy and
	Catheter-based ensing		Impedance Feedback
•	and Imaging	·	
00/00/89	Technology		A D'
00/00/89	The Organizing  Committee of the 7 <sup>th</sup>	Robert Tucker and	A Bipolar Electrosurgical Turp
	World Congress on	Stefan Loening	Loop
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	Endourology and ESWL Foundation for		
	Advancement of		
	International Science		
02/21/89		5-3505	Disabar San Carlotta
02/21/89	US 4,805,616	David S.C. Pao	Bipolar Probes for Ophthalmic
	•		Surgery and Methods of
•			Performing Anterior
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04/00/89	JACC Vol. 13 No. 5,	Benjamin I. Lee, MD,	Thermal Compression and
	1167-75	FACC, Gary J. Becker,	Molding of Atherosclerotic
		MD, Bruce F. Waller,	Vascular Tissue With Use of
		MD, FACC, Kevin J.	Radiofrequency Energy:
		Barry, MS, Raymond J.	Implications for
		Connolly, Ph.D,	Radiofrequency Balloon
· · · · · · · · · · · · · · · · · · ·		Jonathan Kaplan, MD,	Angioplasty
<u> </u>		Alan R. Shapiro, MS,	

		Paul C. Nardella, BS	<del></del>
05/23/89	US 4,832,048	Donald Cohen	Such All V G
00/00/90	Urological Research	R.D. Tucker, E.V.	Suction Ablation Catheter
	18:291-294	Kramolowsky, and C.E.	In vivo effect of 5 French
	10.271-254	Platz	bipolar and monopolar
		Flatz	electrosurgical probes on the
02/00/90	Journal of Urology	- E	porcine bladder
02100130	Vol. 143, 275-277	Eugene V.	Use of 5F Bipolar
	VOI. 143, 213-211	Kramolowsky and Robert D. Tucker	Electrosurgical Probe in
		Robert D. Tucker	Endoscopic Urologiical
04/05/90	WO 90/03152	John Considine, John	Procedures
04/03/30	WO 50/03132	Colin	Electro-surgical Apparatus for
		Com	Removing Tumours from
05/01/90	US 4,920,978	David P. Colvin	Hollow Organs of the Body
03/01/30	034,520,576	David F. Colvin	Method and Apparatus for the
			Endoscopic Treatment of Deep
			Tumors Using RP
06/26/90	US 4,936,281	Peter Stasz	Hyperthermia
V0/20/30	03 4,730,281	reter Stasz	Ultrasonically Enhanced RF
10/30/90	US 4,966,597	Eric R. Cosman	Ablation Catheter
10/30/30	03 4,200,337	Enc R. Cosman	Thermometric Cardiac Tissue
			Ablation Electrode with Ultra-
			Sensitive Temperature
12/11/90	US 4,976,711	David J. Parins, Mark A.	Detection
12/11/30	03 4,970,711	Rydell, Peter Stasz	Ablation Catheter With
		Ryden, Feler Siasz	Selectively Deployable Electrodes
12/25/90	US 4,979,948	Lesslie A. Geddes,	
	034,575,540	Marvin H. Hinds, Joe D.	Method and Apparatus for
		Bourland, William D.	Thermally Destroying A Layer of An Organ
. ,	}	Voorhees	or An Organ
09/00/91	Journal of Urology	Eugene V.	The Urological Application of
	Vol. 146, 669	Kramolowsky and	Electrosurgery
		Robert D. Tucker	Likeuosuigety
04/16/91	US 5,007,908	Mark A. Rydell	Electrosurgical Instrument
			Having Needle Cutting
			Electrode And Spot-Coag
		1	Electrode
04/23/91	US 5,009,656	Harry G. Reimels	Bipolar Electrosurgical
			Instrument
07/30/91	US 5,035,696	Mark A. Rydell	Electrosurgical Instrument for
			Conducting Endoscopic
	• .	1	Retrograde Sphincterotomy
09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement For
	• • •		Tunneling Through Tissue
09/10/91	US 5,047,027	Mark A. Rydell	Tumor Resector
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10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
01/28/92	US 5,084,044	Robert H. Quint	Apparatus for Endometrial Ablation and Method of Using Same
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
04/28/92	US 5,108,391	Gerhard Flachenecker, Karl Fastenmeier, Heinz Lindenmeier	High-Frequency Generator For Tissue Cutting And For Coagulating In High- Frequency Surgery
06/16/92	US 5,122,138	Kim H. Manwaring	Tissue Vaporizing Accessory and Method for an Endoscope
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
12/15/92	US 5,171,311	Mark A. Rydell, David J. Parins, Steven W. Berhow	Percutaneous Laparoscopic Cholectectomy Instrument
03/30/93	US 5,197,963	David J. Parins	Electrosurgical Instrument with Extendable Sheath for Irrigation and Aspiration
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

In addition, Smith & Nephew may rely on the findings of fact made by Judge William H. Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he found that there was "a substantial question as to whether claim 28 of the '882 patent is invalid for obviousness in light of the Roos '198 patent and the Elsasser and Roos article." Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

# U.S. Patent No. 5,224,592 B1: Claim 1

ISSUE/	T	<u> </u>	
PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
00/00/76	Acta Medicotechnica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 – 134	E. Elsasser and E. Roos	Uber ein Instrument zur leckstromfreien transurethralen Resection (Concerning An Instrument for Transurethral resection
02/24/76	US 3,939,839	Lawrence E. Curtiss	without leakage of current) Resectoscope and Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
01/07/77	2 313 949/ N 76 17587	Siegfried Hiltebrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resertoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
04/26/83	US 4,381,007	James D. Doss	Multipolar Comeal- Shaping Electrode with Flexible Removable Skirt
06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina E. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Bom, Ph.D. Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
04/28/87	US 4,660,571	Stanley R. Hess, Terri Kovacs	Percutaneous Lead Having Radially Adjustable Electrode
06/23/87	US 4,674,499	David S.C. Pao	Coaxial Bipolar Probe
11/22/88	US 4,785,823	Philip E. Eggers, Robert F. Shaw	Methods And Apparatus For Performing In Vivo Blood Thermodilution Procedures
00/00/89	SPIE Vol. 1068 Catheter-based	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback

Γ	<del></del>	Sensing and Imaging	<del></del>	
<b>]</b> .		Technology		
-	00/00/89	The Organizing	Robert Tucker and	
1	,	Committee of the 7th	Stefan Loening	A Bipolar Electrosurgical
	•	World Congress on	ocial Locaing	Turp Loop
1	•	Endourology and		
		ESWL Foundation for	İ	I
		Advancement of		
}		International Science		
<u> </u>	04/23/91	US 5,009,656	Harry G. Reimels	Pinoles Florence incl
		0.000,000	really O. Renners	Bipolar Electrosurgical Instrument
	09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement
				For Tunneling Through
				Tissue
	10/07/91	Bipolar Laparoscopic	Dr. Olsen	Bipolar Laparoscopic
		Cholecystectomy		Cholecystectomy
		Lecture		,
	01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
	02/18/92	US 5,088,997	Louis Delahuerga,	Gas Coagulation Device
			Robert B. Stoddard,	_
<u> </u>			Michael S. Klicek	
<u></u>	03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
	05/12/92	US 5,112,330	Shinichi Nishigaki,	Resectoscope Apparatus
-	04/28/92	170 5 100 301	Shiro Bito	
	04/28/92	US 5,108,391	Gerhard Flachenecker,	High-Frequency Generator
1			Karl Fastenmeier, Heinz Lindenmeier	For Tissue Cutting And
1			Lindenmeter	For Coagulating In High-
	12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo	Frequency Surgery
.	LE GEL JE	03 3,107,039	Ninomiya	Blood Coagulating Apparatus
	05/04/93	US 5,207,675	Jerome Canady	Surgical Coagulation
1		00 3,207,073	Jerome Canada	Device Coagulation
<del></del>	04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic
			LACIMIU I . L COULUI	Electrosurgical Pencil
	06/13/95	US 5,423,882	Warren M. Jackman,	Catheter Having Electrode
			Wilton W. Webster, Jr.	With Annular Recess and
				Method of Using Same
	10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter
				And Method For
				Resolving Artherosclerotic
[				Plaque By Radio
			•	Frequency Sparking

Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

# U.S. Patent No. 5,224,592 B1: Claim 23

ISSUE/		<del></del>	
PUBLICATION DATE	PATENT NUMBER/ PUBLICATION	INVENTOR/AUTHOR	TITLE
00/00/76	Acta Medicotechnica (Medizinal-Markt), Vol. 24, No. 4, 1976 129 – 134	E. Elsasser and E. Roos	Uber ein Instrument zur leckstromfreien transurethralen Resection (Concerning An Instrument for Transurethral resection without leakage of current)
02/24/76	US 3,939,839	Lawrence E. Curtiss	Resectoscope and Electrode Therefor
07/20/76	US 3,970,088	Charles F. Morrison	Electrosurgical Devices Having Sesquipolar Electrode Structures Incorporated Therein
01/07/77	2 313 949/ N 76 17587	Siegfried Hiltebrandt et Ludwig Bonnet	Boucle de sectionnement a une ou deux branches pour resertoscope
02/21/78	US 4,074,718	Charles F. Morrison, Jr.	Electrosurgical Instrument
09/26/78	US 4,116,198	Eberhard Roos	Electro-Surgical Device
06/00/85	JACC Vol. 5, No. 6, 1382-6	Cornelis J. Slager, MSc, Catharina B. Essed, MD, Johan C.H. Schuurbiers, BSc, Nicolaas Bom, Ph.D, Patrick W. Serruys, MD, Geert T. Meester, MD, FACC	Vaporization of Atherosclerotic Plaques by Spark Erosion
04/28/87	US 4,660,571	Stanley R. Hess, Terri Kovacs	Percutaneous Lead Having Radially Adjustable Electrode
00/00/89	SPIE Vol. 1068 Catheter-based Sensing and Imaging Technology	Paul C. Nardella	Radio Frequency Energy and Impedance Feedback
00/00/89	The Organizing Committee of the 7th World Congress on Endourology and ESWL Foundation for Advancement of International Science	Robert Tucker and Stefan Loening	A Bipolar Electrosurgical Turp Loop

09/10/91	US 5,047,026	Mark A. Rydell	Electrosurgical Implement For Tunneling Through Tissue
10/07/91	Bipolar Laparoscopic Cholecystectomy Lecture	Dr. Olsen	Bipolar Laparoscopic Cholecystectomy
01/14/92	US 5,080,660	Terrence J. Buelna	Electrosurgical Electrode
02/18/92	US 5,088,997	Louis Delahuerga, Robert B. Stoddard, Michael S. Klicek	Gas Coagulation Device
03/24/92	US 5,098,431	Mark A. Rydell	RF Ablation Catheter
05/12/92	US 5,112,330	Shinichi Nishigaki, Shiro Bito	Resectoscope Apparatus
04/28/92	US 5,108,391	Gerhard Flachenecker, Karl Fastenmeier, Heinz Lindenmeier	High-Frequency Generator For Tissue Cutting And For Coagulating In High- Frequency Surgery
12/01/92	US 5,167,659	Naoki Ohtomo; Shizuo Ninomiya	Blood Coagulating Apparatus
05/04/93	U\$ 5,207,675	Jerome Canady	Surgical Coagulation Device
04/26/94	US 5,306,238	Richard P. Fleenor	Laparoscopic Electrosurgical Pencil
06/13/95	US 5,423,882	Warren M. Jackman, Wilton W. Webster, Jr.	Catheter Having Electrode With Annular Recess and Method of Using Same
10/03/95	US 5,454,809	Michael Janssen	Electrosurgical Catheter And Method For Resolving Artherosclerotic Plaque By Radio Frequency Sparking

Smith & Nephew may also rely on the file history of U.S. Patent No. 4,116,198.

Smith & Nephew further contends that claims 1 and 28 of U.S. Patent No. 5,697,882 are invalid under 35 U.S.C. § 112 because the specification of U.S. patent No. 5,697,882 does not describe the manner and process of making and using the alleged invention, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same. Rather, undue experimentation would be necessary to successfully practice the claimed apparatus. In addition, Smith & Nephew

may rely on the findings of fact made by Judge William H. Orrick in his Memorandum Decision and Order dated December 1, 1998, in which he concluded that there was a substantial question that claim 1 of the '882 patent is invalid for lack of enablement.

Smith & Nephew also contends that claim 28 of U.S. Patent No. 5,697,882 and claim 1 of U.S. Patent No. 5,224,592 B1 are indefinite, and therefore invalid under 35 U.S.C. § 112.

Smith & Nephew's investigation into its defenses is continuing, and it may assert additional invalidity defenses as discovery progresses.

Dated: December 9, 2001

FISH & RICHARDSON P.C.

William F. Marsden, Yr. (#2247) 919 N. Market Street, Suite 1100

P.O. Box 1114

Wilmington, DE 19899-1114 Telephone: (302) 652-5070 Facsimile: (302) 652-0607

Mark J. Hebert 225 Franklin Street Boston, MA 02110-2804 Telephone: (617) 542-5070 Facsimile: (617) 542-8906

Kurtis MacFerrin 2200 Sand Hill Road, Suite 100 Menlo Park, CA 94025 Telephone: (650) 322-5070 Facsimile: (650) 854-0875

Attorneys for Defendant SMITH & NEPHEW, INC.

William J. Marsden, J.

### CERTIFICATE OF SERVICE

I hereby certify that on this \_\_\_\_\_ day of December, 2001, a true and correct copy of the within document was caused to be served on the attorneys of record at the following addresses as indicated:

### BY HAND DELIVERY

Jack B. Blumenfeld (#1014)
MORRIS, NICHOLS, ARSHT & TUNNELL
1201 N. Market Street
P.O. Box 1347
Wilmington, DE 19899
Telephone: 302-658-9200
Facsimile: 302-658-3989

#### BY FEDERAL EXPRESS

Matthew D. Powers
Jared Bobrow
Perry Clark
WEIL, GOTSHAL & MANGES
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Facsimile: 605-802-3100

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